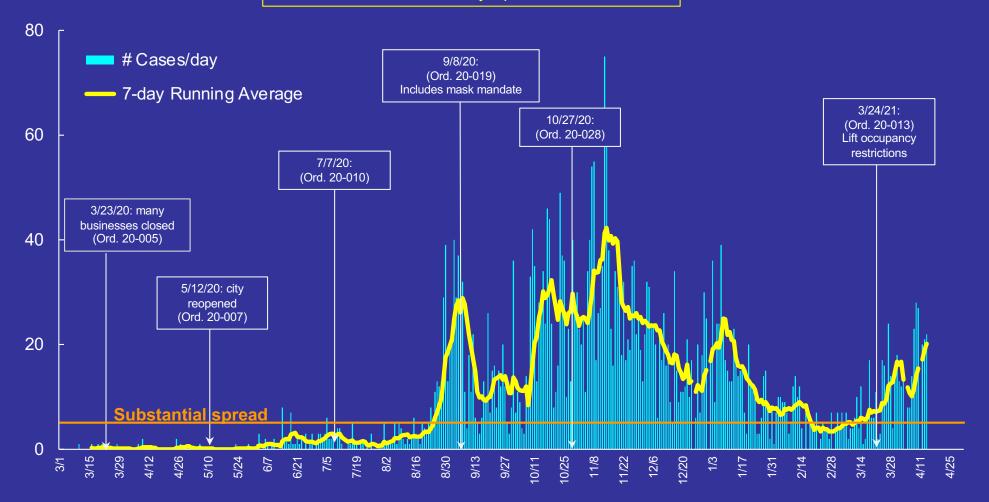
## **COVID-19 Situation**

**Daily Case Data** 

Number of Confirmed & Probable COVID-19 Cases by Day

Current Level of Community Spread<sup>^</sup>: substantial

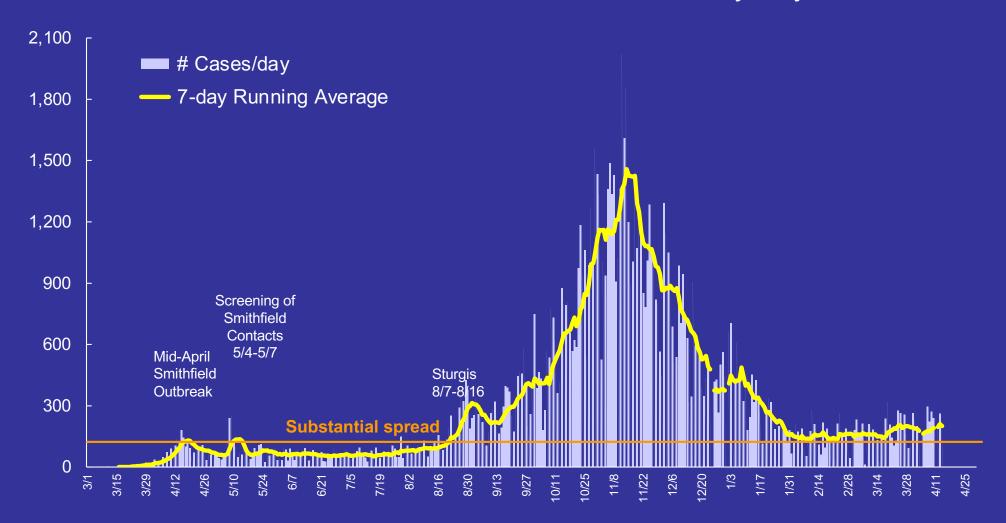


Substantial spread = 100+ new cases per week/100,000 population or 34 cases/week or 5 cases/day for Brookings County.

No SDDOH data update on 11/26, 12/25 & 1/1; data reported 11/27 was divided between 11/26 & 11/27.

For description of ordinances visit: https://cityofbrookings.org/699/Guidelines-Ordinance-Information

#### Number of Confirmed & Probable Cases by Day

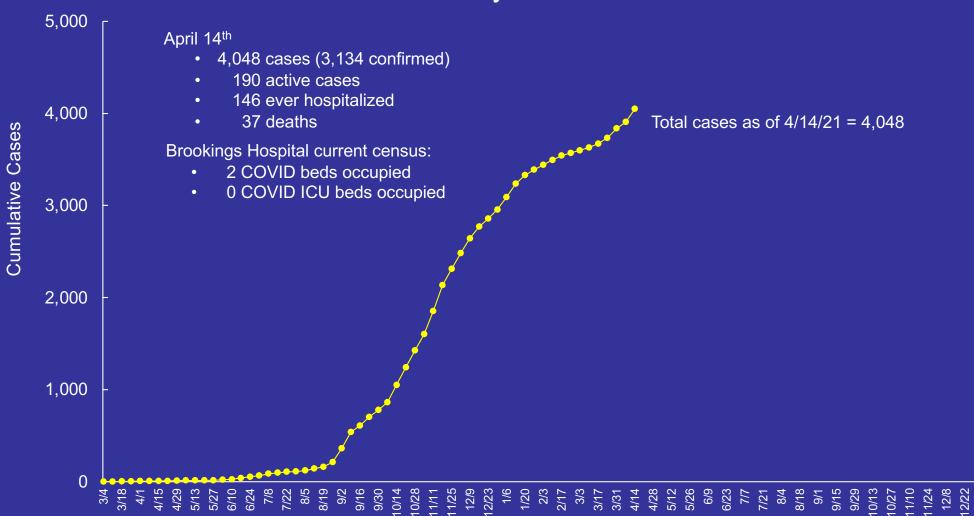


Substantial spread = 100+ new cases per week/100,000 population or 864+ cases/week or 123+ cases/day for South Dakota No SDDOH data update on 11/26, 12/25 & 1/1; data reported 11/27 was divided equally between 11/26 & 11/27 Oct 7: Probable cases added (antigen tests); 426 probable cases diagnosed prior to 10/7 not included in this graph.

## **COVID-19 Situation**

**Brookings County** 

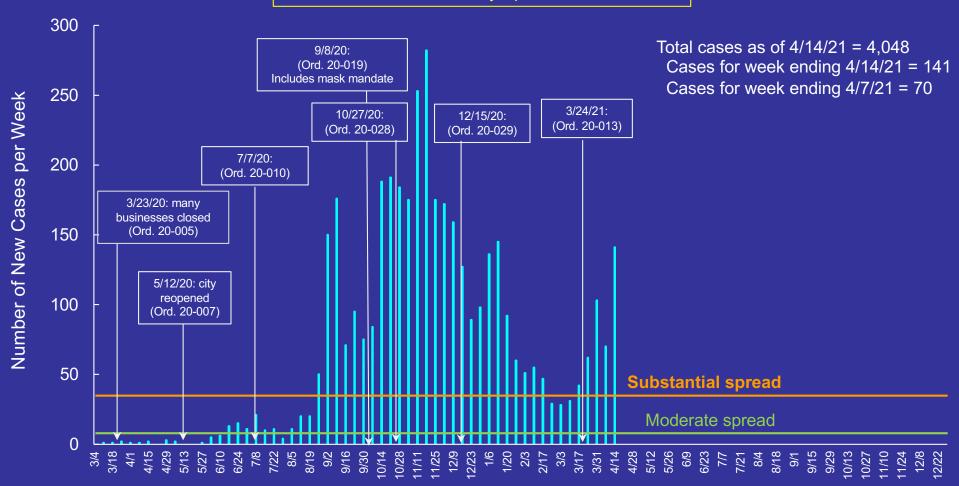
2020-2021 Cumulative Number of Confirmed & Probable Cases by Week



State residents only. Includes confirmed cases by PCR & probable cases by antigen testing.

2020-2021 Number of Confirmed & Probable COVID-19 Cases per Week

Current Level of Community Spread<sup>^</sup>: substantial

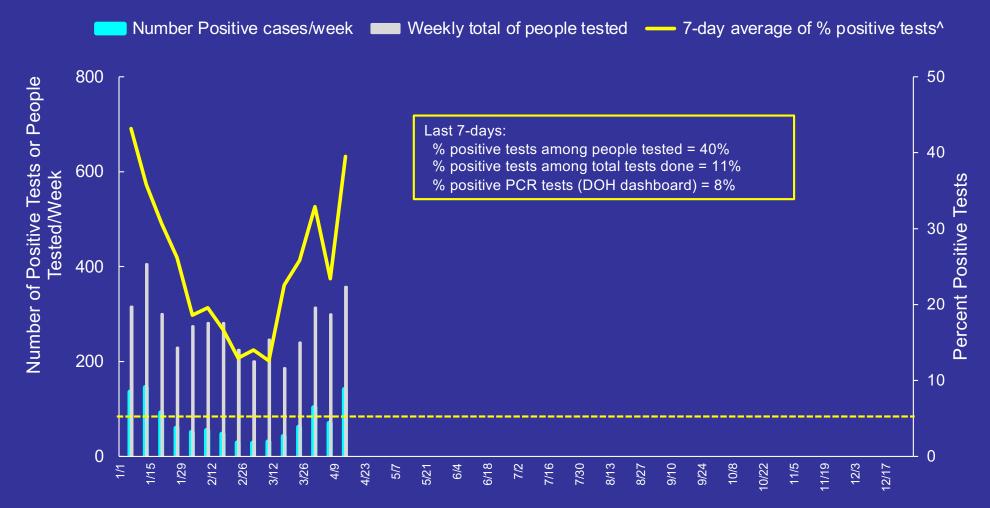


Substantial spread = 100+ new cases per week/100,000 population or 34 cases/week for Brookings County.

Moderate spread = 10-100 cases per 100,000 (4-33 cases/week); Minimal spread = <10 cases/100,000 (<4 cases/week)

For description of ordinances visit: https://cityofbrookings.org/699/Guidelines-Ordinance-Information

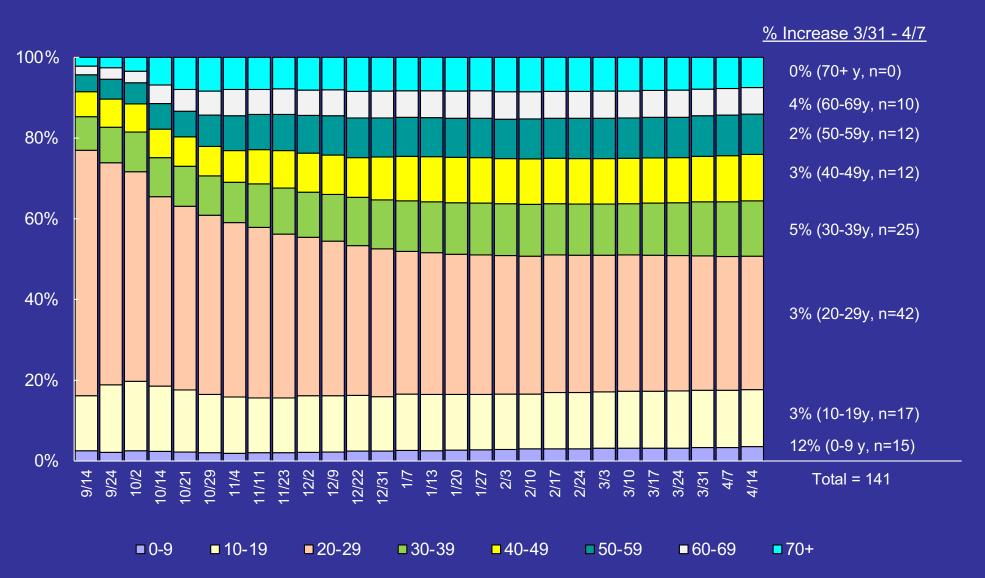
2021 Weekly Percentage of Positive Tests (PCR + Antigen)



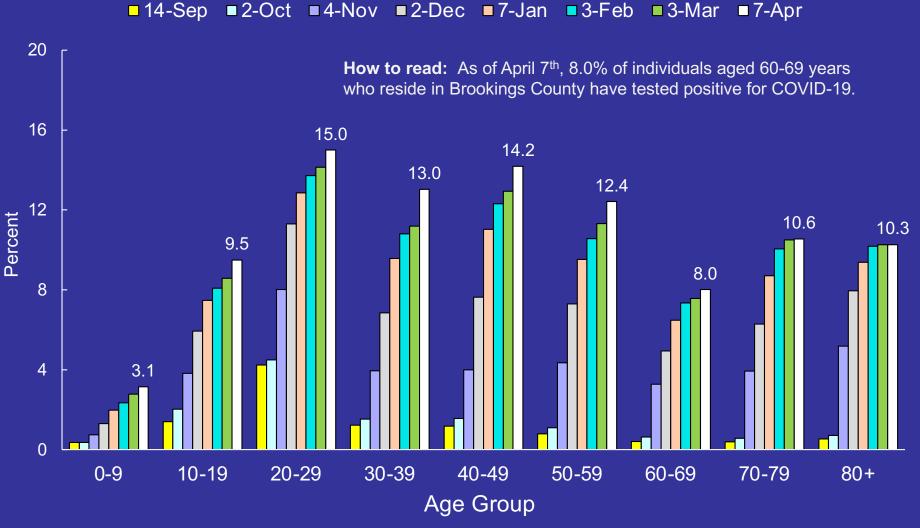
^ Calculated as sum of 7-days of previous positive cases/sum of 7-days of total tests completed\*100. Duplicate tests on same individual not included. Used total cases and total persons tested on DOH website (includes sentinel & surveillance samples).

The rate of positivity provides insight into whether enough testing is being conducted. If positivity is high, it suggests that the sickest are being tested and milder or asymptomatic cases may be missed. The WHO has said that in countries that have extensive testing for COVID-19, percent positive should remain at 5% or lower for at least 14 days (dashed yellow line).

Age Distribution of Brookings County Cases
Who Have Tested Positive Over Time



Cumulative Percent of Population within Each Age Group Testing Positive in Brookings County by Month

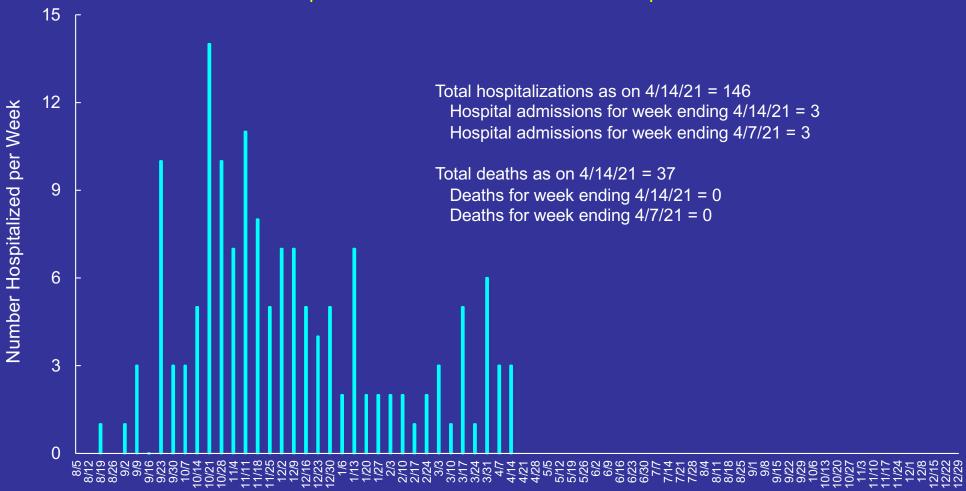


Overall, 11.1% of Brookings County residents have tested positive as of April 7th.

Case data as close to the first of the month as possible was used. Population estimates from 2019 Census estimates. Updated monthly.

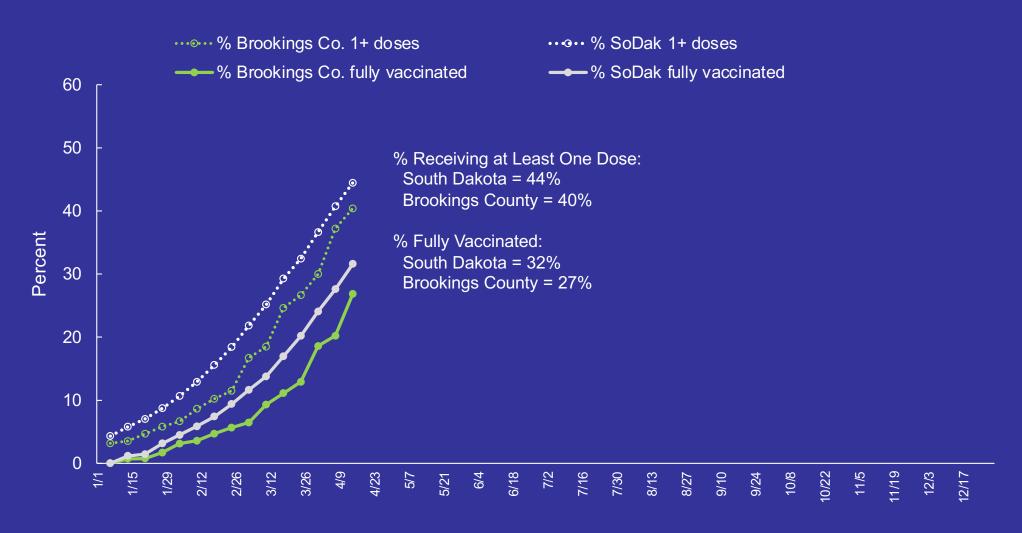
#### 2020-2021 Number of New Hospitalizations per Week

Hospitalization data after 4/7/21 are incomplete



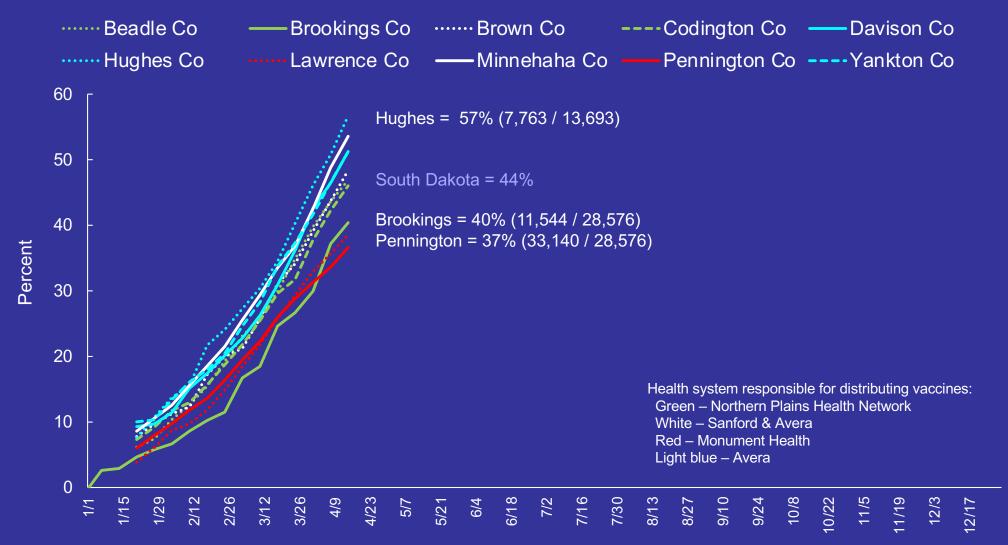
Includes only Brookings County residents. Began collecting data on 8/5/2020 (4 hospitalizations prior to 8/5 are not shown).

2021 Percent of Brookings County & South Dakota Population Aged 16+ Vaccinated by Week



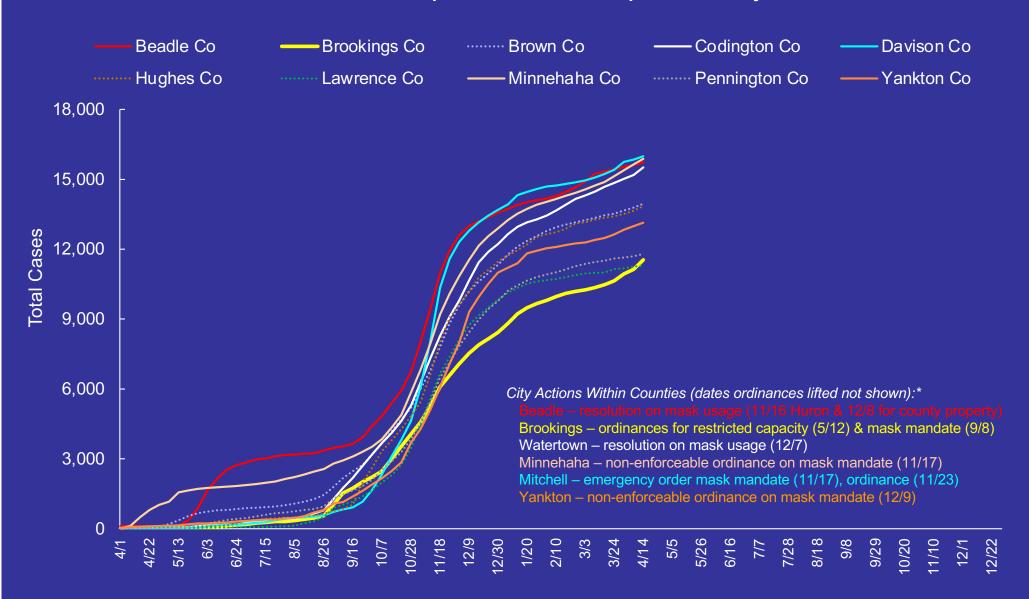
Based on 2019 Census population estimate for residents aged 16+ years in Brookings County of 29.587 & for SD of 689,981. Does not include vaccinations via IHS and VA.

2021 Percent of Population Aged 16+ Years Receiving at Least One Vaccine<sup>^</sup>

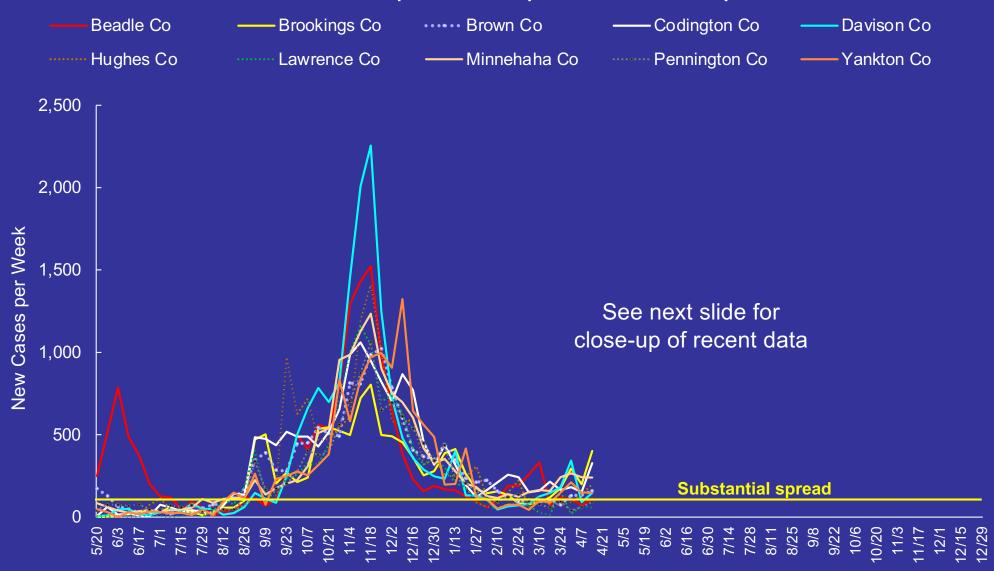


A Based on 2019 Census population estimates for residents aged 16+ years. Does not include vaccinations via IHS and VA.

#### Cumulative Cases per 100,000 Population by Week

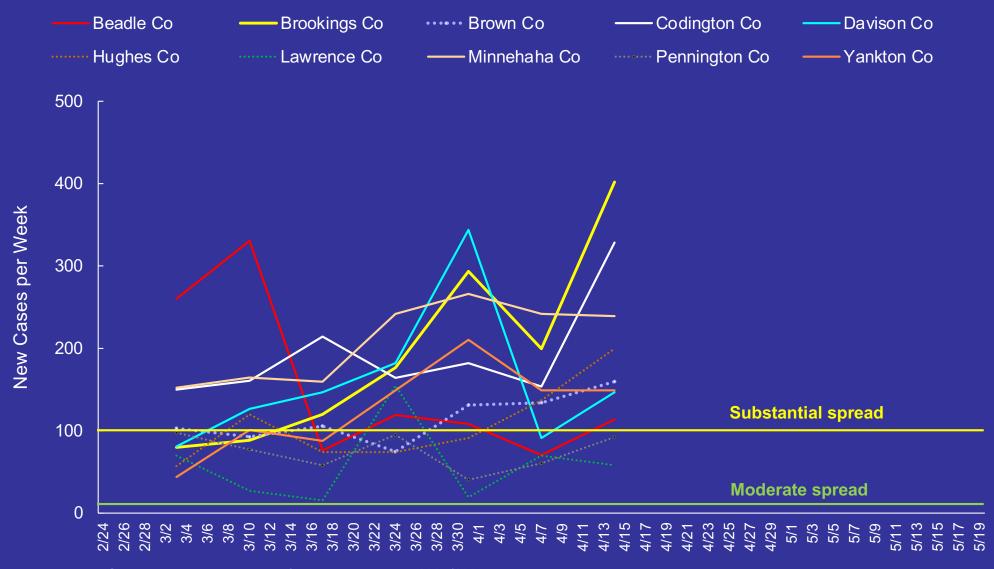


New Cases per Week per 100,000 Population



Spread based on new cases/week: substantial = 100+/100K population. 2019 Census county population estimates used.

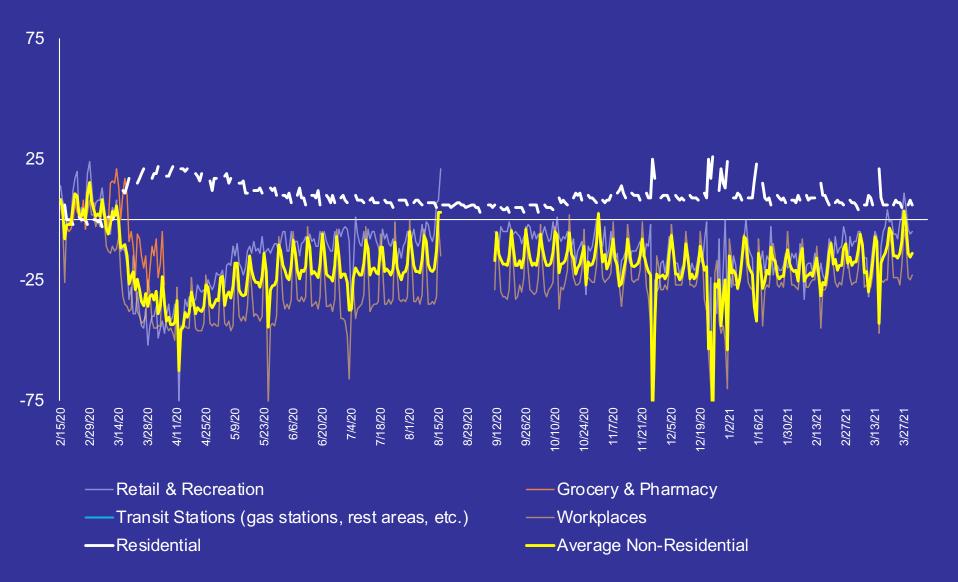
New Cases per Week per 100,000 Population



Spread based on new cases/week: substantial = 100+/100K population. Moderate spread = 10-100 cases per 100,000; Minimal spread = <10 cases/100,000. 2019 Census county population estimates used.

#### **Brookings County Mobility Data via Google**

Percent Change in Mobility



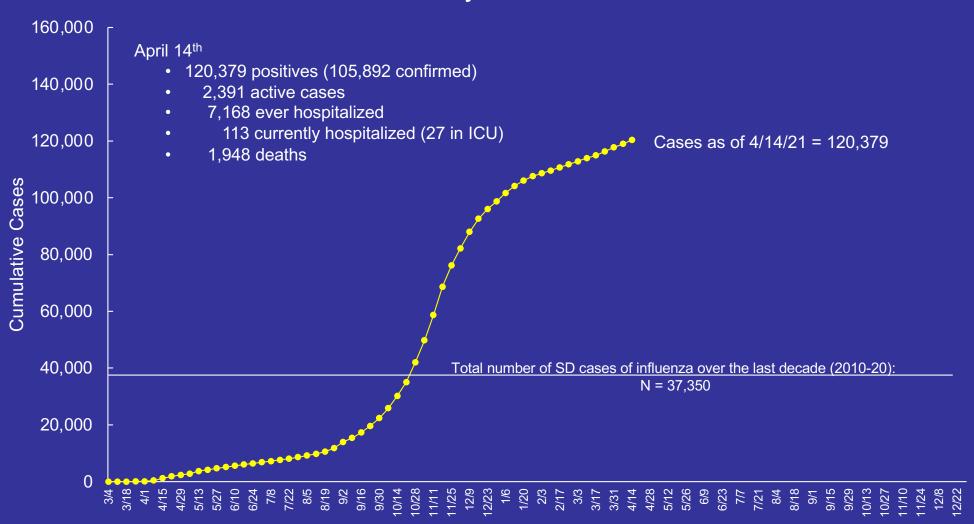
Baseline: normal value for day of week (1/3-2/6/20)

Residential shows a change in duration, other categories are change in total visitors. Parks not shown. Data from Google COVID-19 Community Mobility Reports: https://www.google.com/covid19/mobility/

# **COVID-19 Situation**

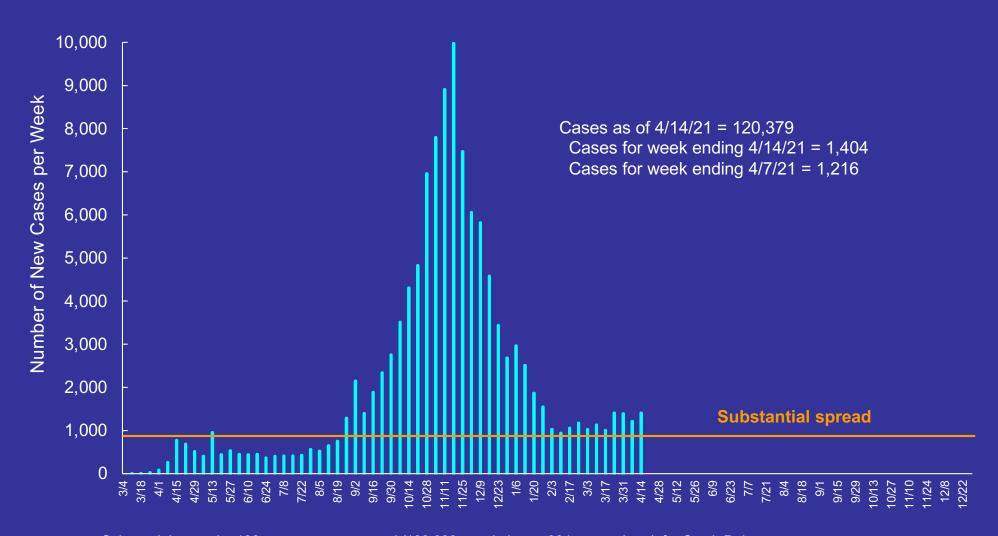
**South Dakota** 

# 2020-21 Cumulative Number of Confirmed & Probable Cases by Week



State residents only. Includes confirmed cases by PCR & probable cases by antigen testing.

2020-2021 Confirmed & Probable Cases per Week

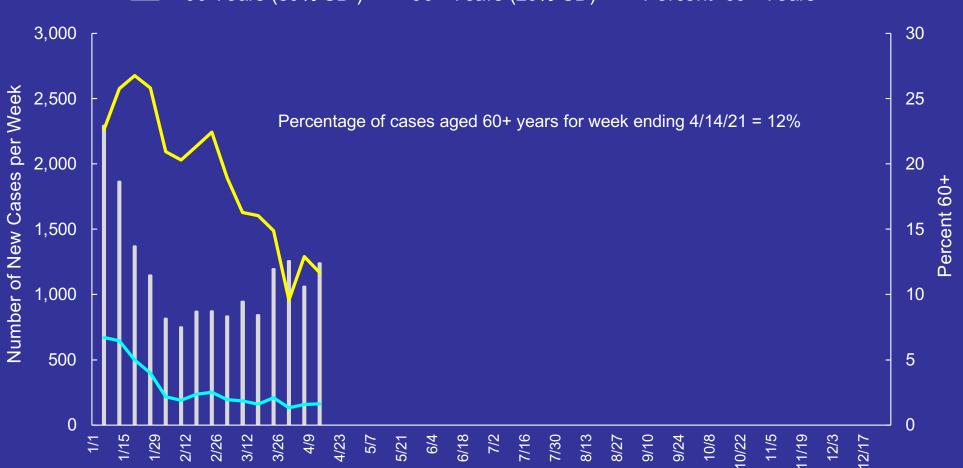


Substantial spread = 100+ new cases per week/100,000 population or 864+ cases/week for South Dakota. Moderate spread = 10-100 cases per 100,000; Minimal spread = <10 cases/100,000.

# South Dakota COVID-19 Situation Age Distribution

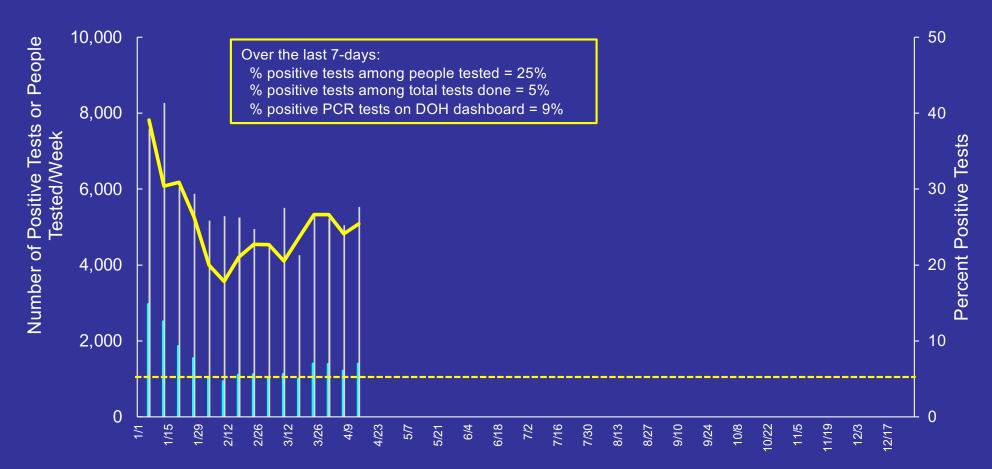
2021 Number of Confirmed & Probable Cases by Age per Week





2021 Percentage of Positive Tests (PCR + Antigen)

Number Positive Cases/week Total unique people tested/week 7-day average of % positive tests^

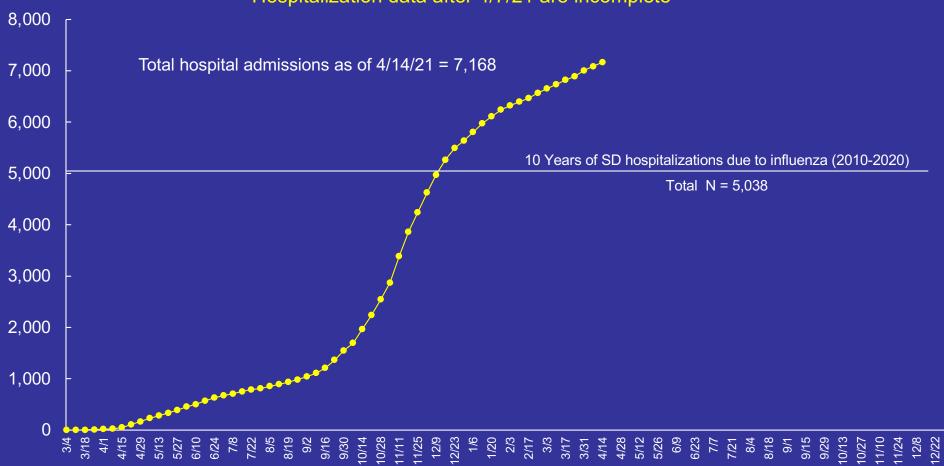


^ Calculated as sum of 7-days of previous positive cases/sum of 7-days of total tests completed\*100. Duplicate tests on same individual not included. Used total cases and total persons tested on DOH website (includes sentinel & surveillance samples).

The rate of positivity provides insight into whether enough testing is being conducted. If positivity is high, it suggests that the sickest are being tested and milder or asymptomatic cases may be missed. The WHO has said that in countries that have extensive testing for COVID-19, percent positive should remain at 5% or lower for at least 14 days.

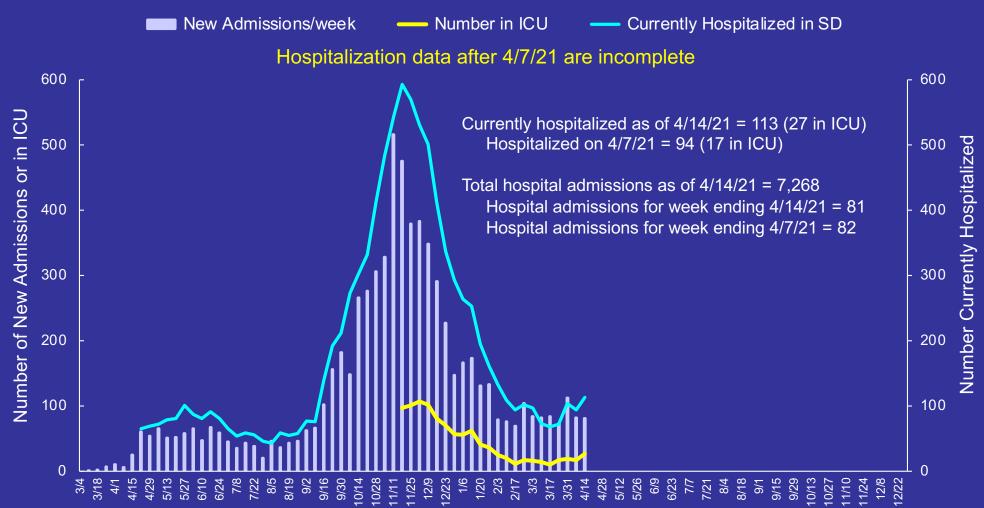
#### 2021 Cumulative Number of Hospitalizations by Week

Hospitalization data after 4/7/21 are incomplete



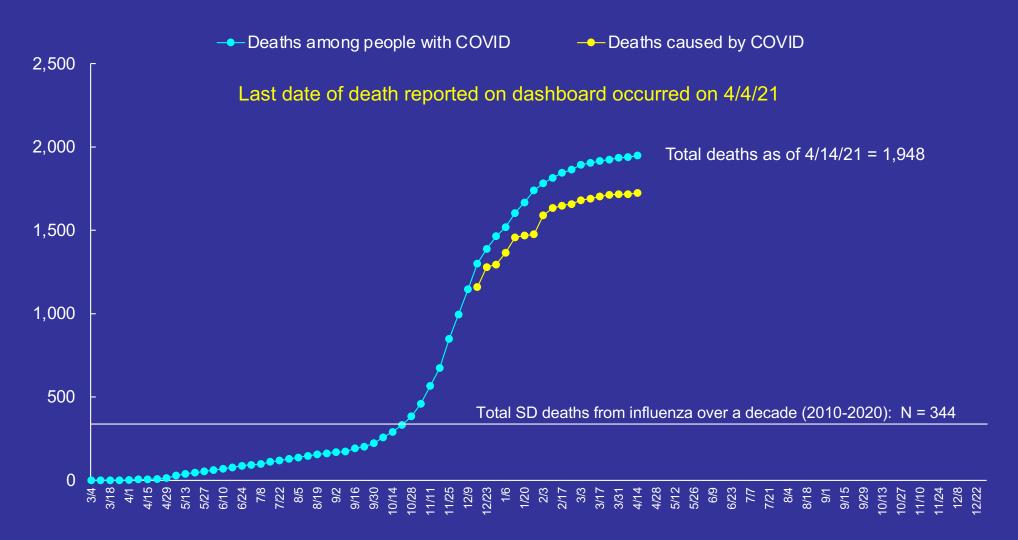
Includes only state residents.

2020-2021 Weekly Hospitalization Data



Currently hospitalized includes state and out-of-state residents and transfers in from other states, but not residents transferred out-of-state. New admissions include only state residents; does not include patients on home health care. Number in ICU and currently hospitalized recorded on Wednesdays.

2021 Cumulative Number of Deaths by Week



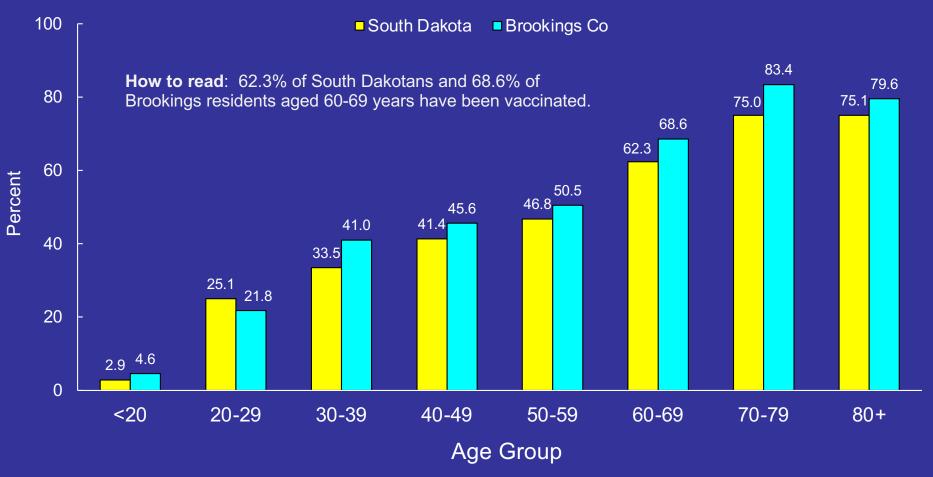
Dept of Health does not report deaths until a certified death record is filed. By law, a death record must be filed within 5 days of the date of death. Deaths caused by COVID based on death certificates where COVID is cause of death or contributing cause. Deaths among people with COVID include death certificates stating COVID as well as data from national surveillance system that identifies COVID cases and deaths within 20 days of infection that do not include COVID on death certificate. See DOH dashboard, death tab for detailed definitions.

2020-21 Number of Deaths per Week among People with COVID-19



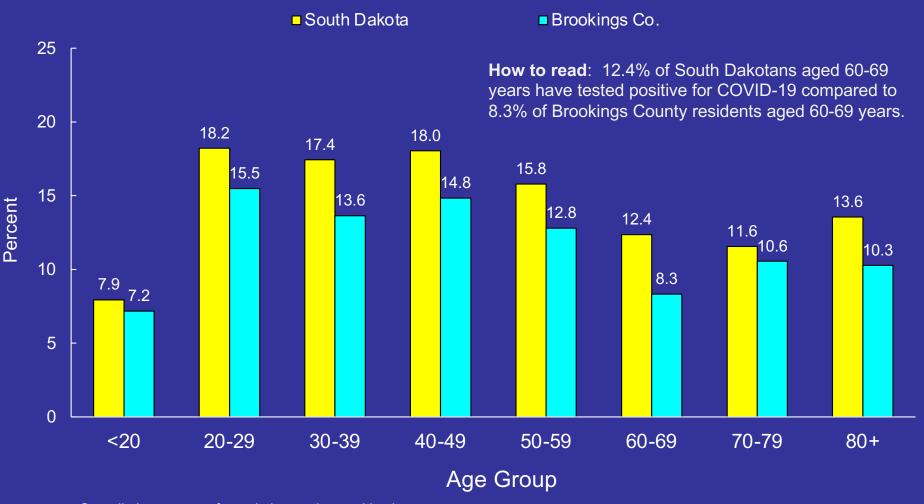
See DOH dashboard, death tab for detailed definitions.

Percent of Population Receiving at Least One Vaccine by Age as of April 14, 2021



Overall, 47% of South Dakotans and 44% of Brookings County residents aged 20+ years have been immunized. Does no include data from Veterans Affairs (VA) and Indian Health Services (IHS). 2019 US Census data used for denominators. 51% of state population aged 16 years and older has received at least one dose, including VA & IHS.

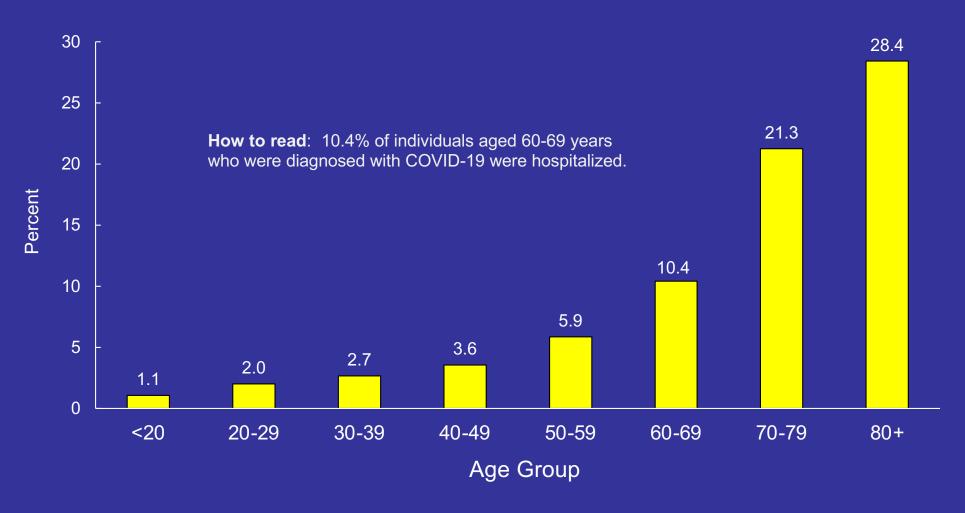
Percent of South Dakota & Brookings Population Ever Testing Positive by Age as of April 14, 2021



Overall, the percent of population testing positive is: 13.6% for South Dakota 11.5% for Brookings County

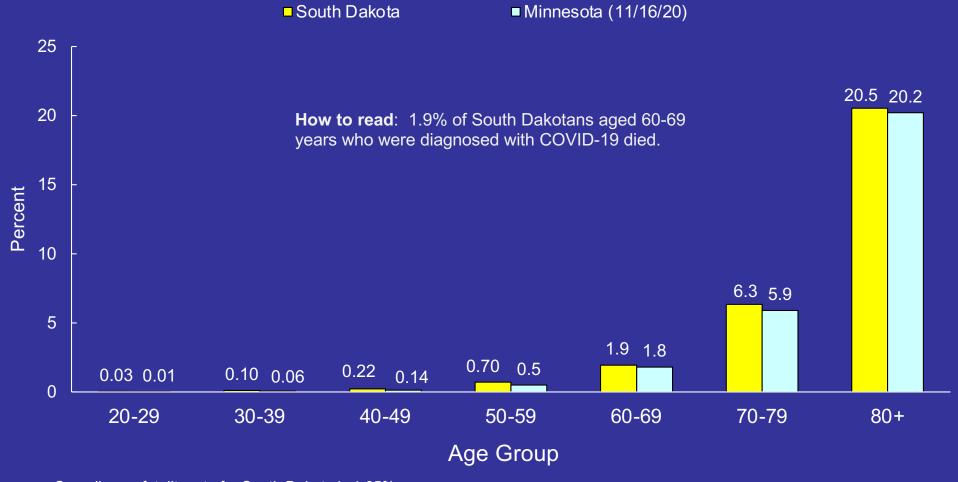
2019 SD Pop (US Census) https://doh.sd.gov/COVID/Dashboard.aspx Brookings data from SD Department of Health

Percent of Cases Ever Hospitalized by Age as of April 14, 2021



Overall, 6.0% of South Dakotans who tested positive have been hospitalized. Calculated as (ever hospitalized/tested positive)\*100 using South Dakota data.

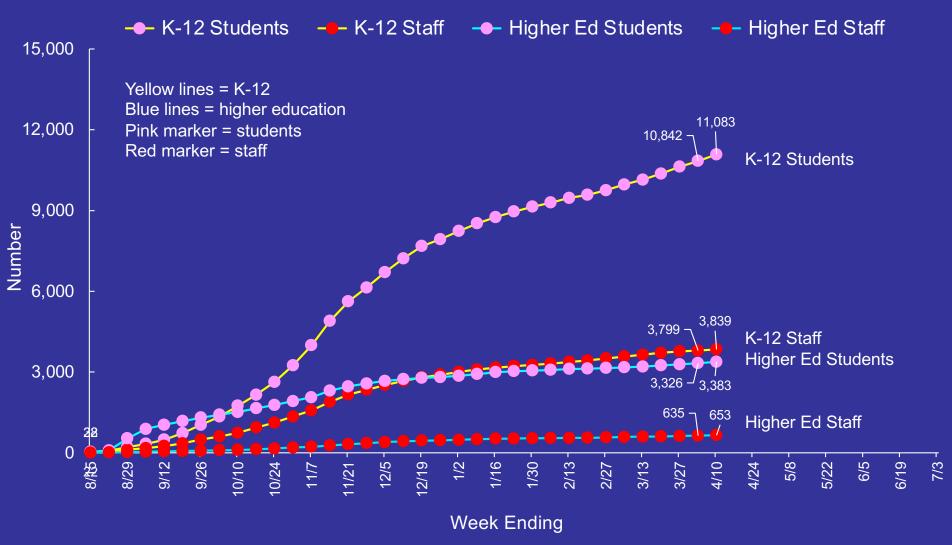
Case Fatality Rates by Age as of April 14, 2021



Overall case fatality rate for South Dakota is 1.65%. Case fatality rate calculated as COVID deaths/(COVID deaths + recovered)\*100 (https://doh.sd.gov/COVID/Dashboard.aspx) Minnesota data: CFR = (deaths/cases)\*100 (https://www.health.state.mn.us/diseases/coronavirus/stats/covidweekly46.pdf) Data not given for ages <19 years.

#### **South Dakota School Situation**

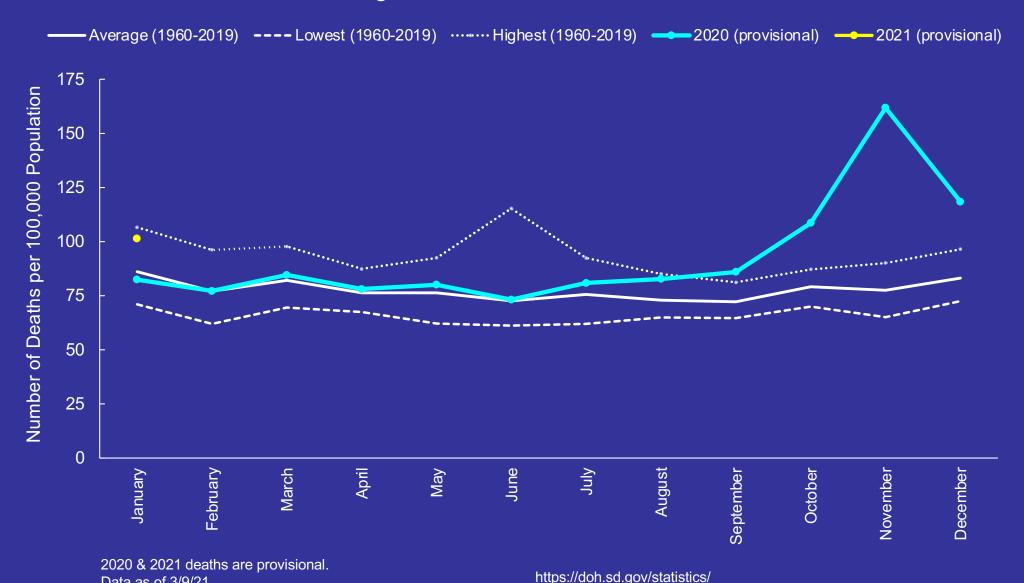
#### Cumulative Number of COVID-19 Cases by Week



Probable cases added retroactively on 2/22/21.

### **South Dakota Deaths**

Deaths per 100,000 Population by Month with Average and Lowest and Highest Rates from 1960 to 2019

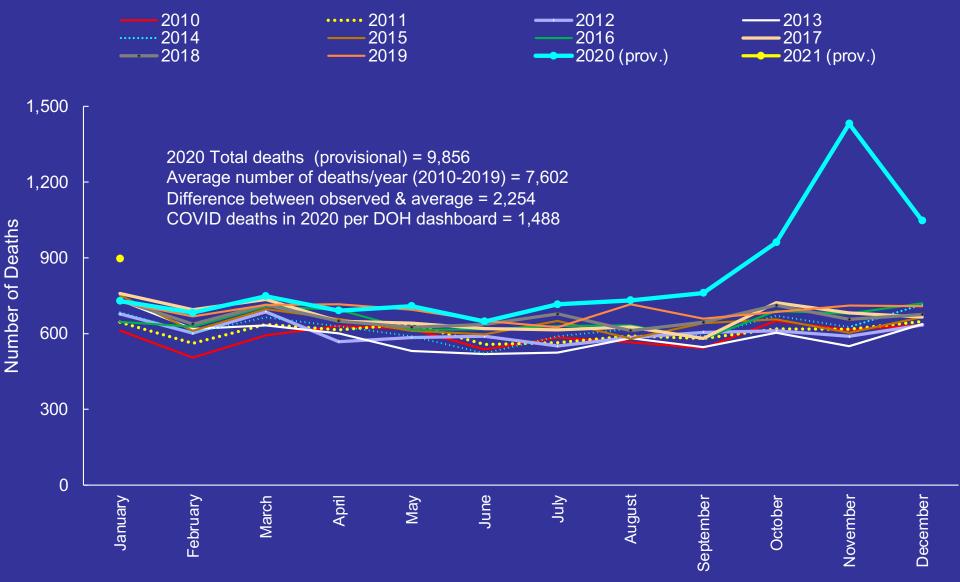


https://doh.sd.gov/documents/statistics/Mortality-Report-2020-2021.pdf

Data as of 3/9/21

#### **South Dakota Deaths**

Number of Deaths by Year and Month

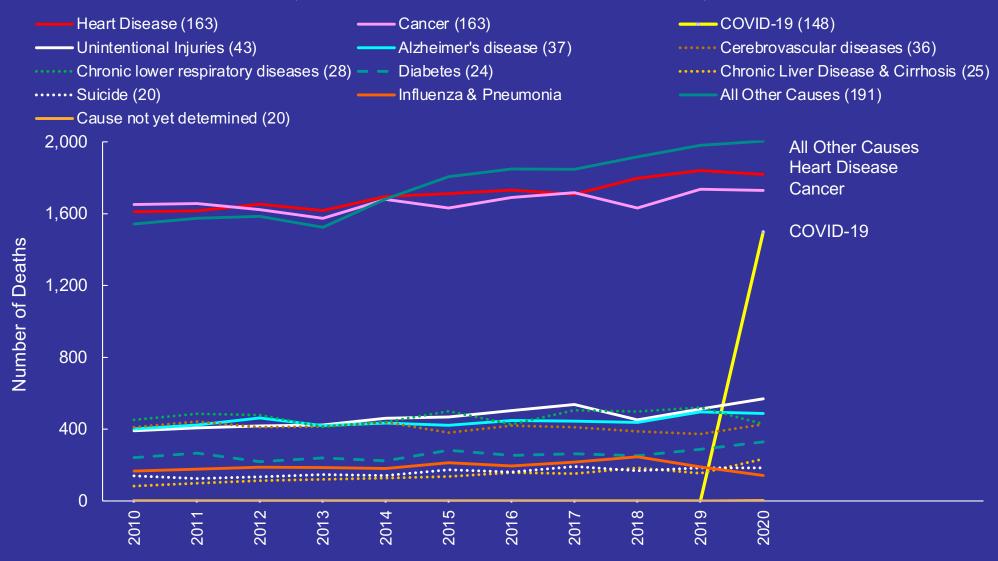


2020 & 2021 deaths are provisional. Data as of 3/9/21

#### **South Dakota Deaths**

#### Number of Deaths by Cause and Year

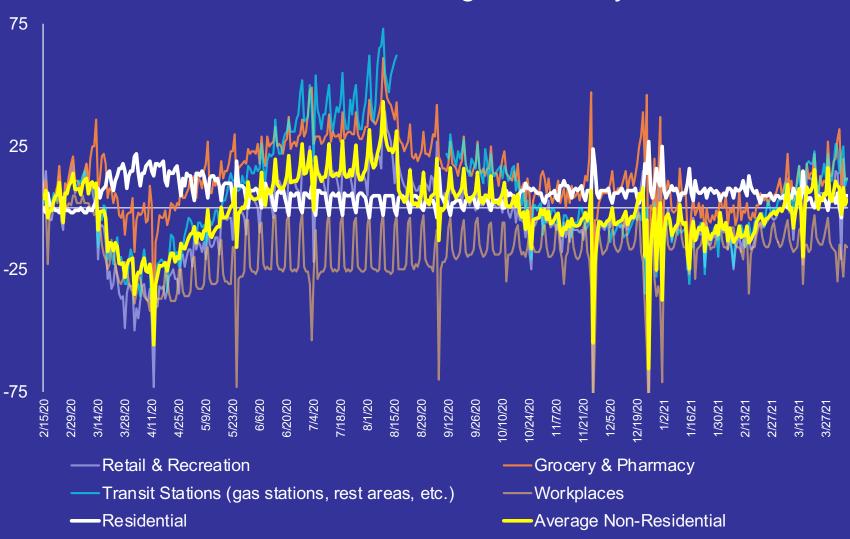
(numbers in parentheses are Jan 2021 deaths)



2020 & 2021 deaths are provisional. Data as of 3/9/21

#### South Dakota Mobility Data via Google

#### Percent Change in Mobility



Baseline: normal value for day of week (1/3-2/6/20)

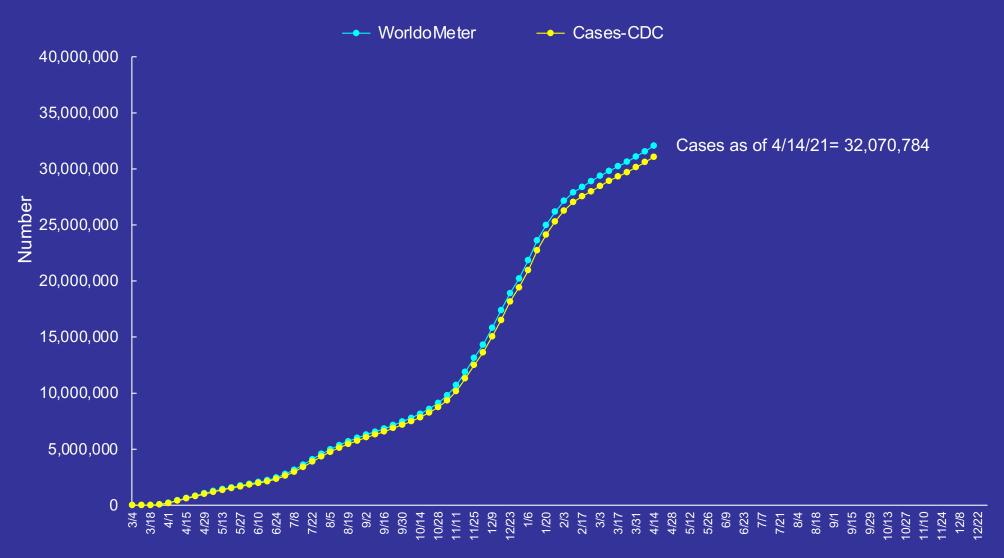
Residential shows a change in duration, other categories are change in total visitors. Parks not shown.

Data from Google COVID-19 Community Mobility Reports: https://www.google.com/covid19/mobility/

# **COVID-19 Situation**

U.S.

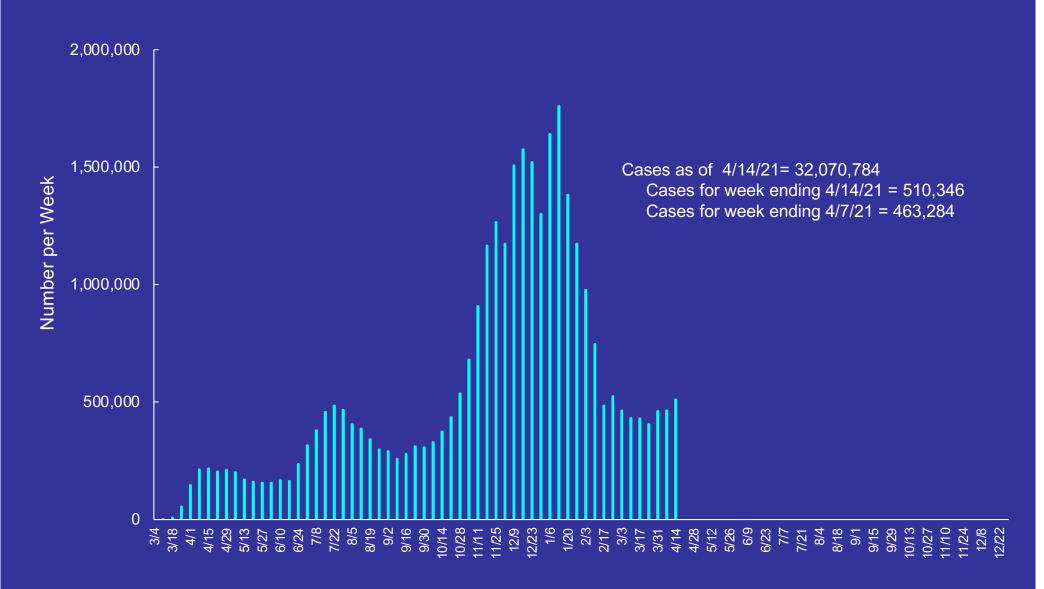
#### Cumulative Number of Confirmed Cases by Week



Numbers cited are from WorldoMeter

https://www.worldometers.info/coronavirus/#countries https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html

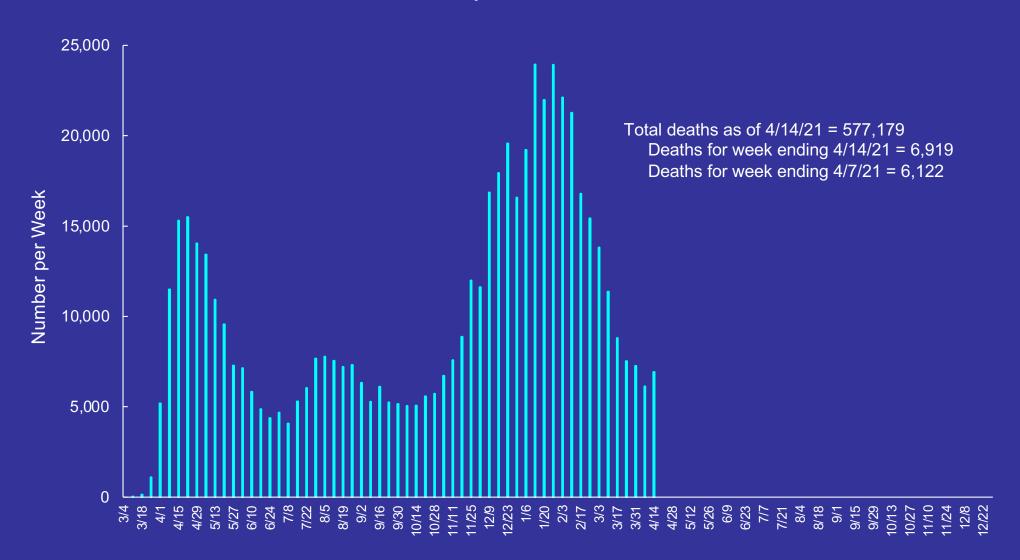
#### Number of Newly Diagnosed Cases per Week



#### Cumulative Number of Deaths from COVID-19 by Week

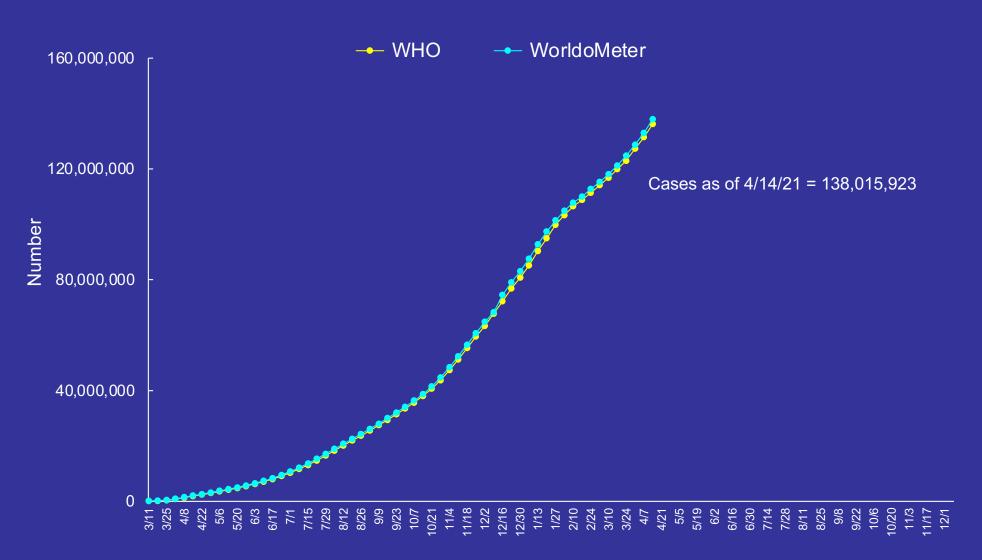


#### Number of Deaths per Week from COVID-19



# COVID-19 Situation World

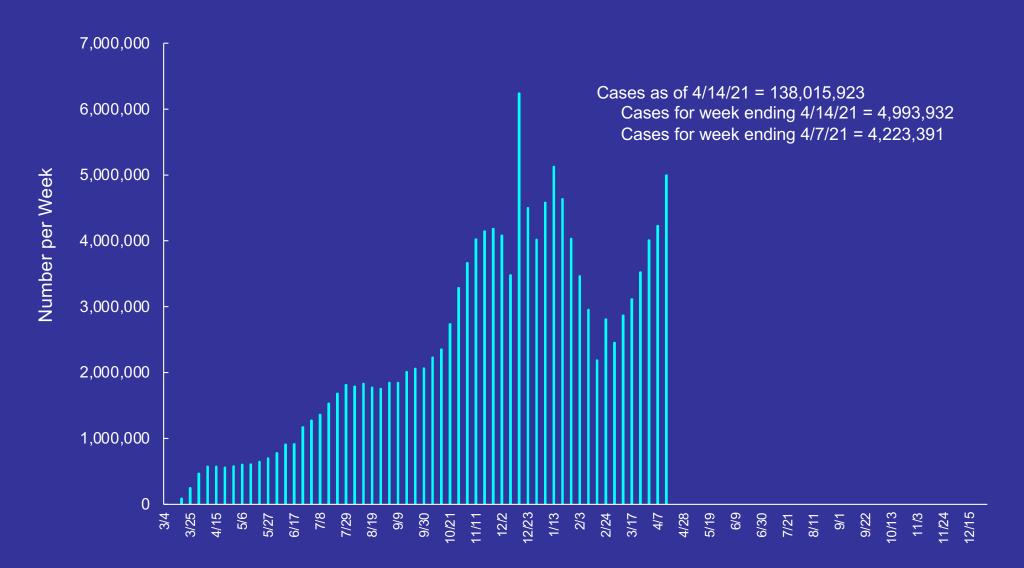
#### **Cumulative Number of Confirmed Cases**



Numbers cited are from WorldoMeter

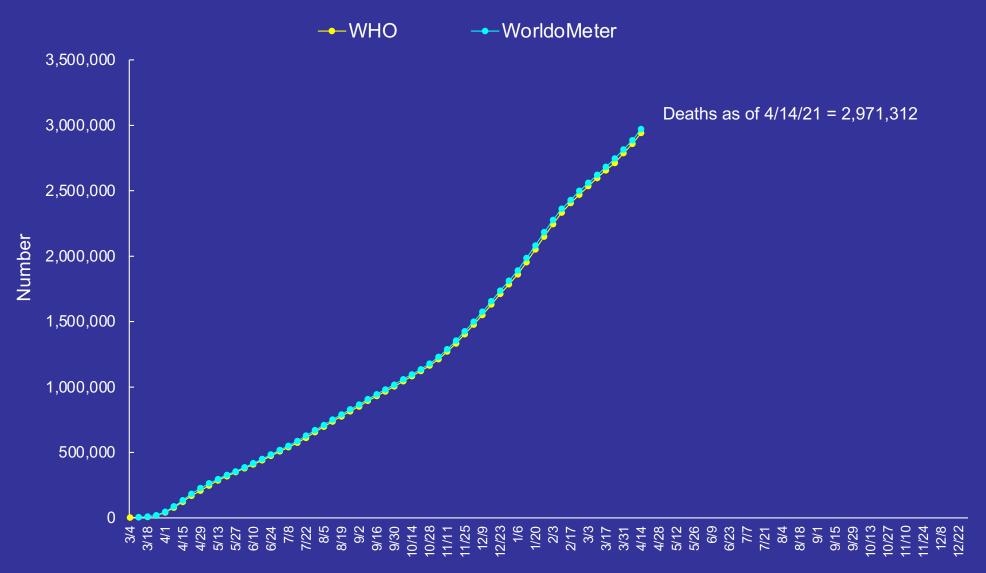
https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports https://www.worldometers.info/coronavirus/

#### Number of Newly Confirmed Cases per Week



Numbers cited are from WorldoMeter

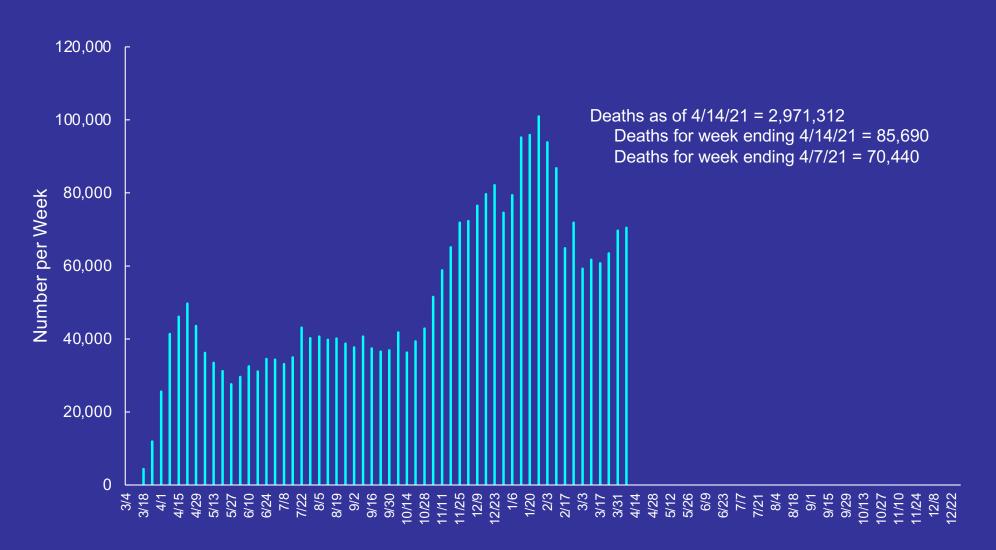
#### Cumulative Number of Deaths from COVID-19



Numbers cited are from WorldoMeter

https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports https://www.worldometers.info/coronavirus/

#### Number of Deaths from COVID per Week



Numbers cited are from WorldoMeter